DIVISION OF ENVIRONMENTAL HEALTH SOLID WASTE PROGRAM 555 CORDOVA STREET ANCHORAGE, ALASKA 99501

tracy mitchell@envircon.state.ak.us

**Telephone:** (907) 269-1099

Fax: (907) 269-7655

http://www.state.ak.us/dec/home.htm

#### Certified Mail Return Receipt Requested # 7000-0520-0025-2110-0090

September 20, 2001

Mr. Larry Evanoff Chenega IRA Council P.O. Box 8079 Chenega Bay, AK 99574-9999

Re: Chenega Bay Landfill – Solid Waste Permit No. 0023-BA003

Dear Mr. Evanoff:

The Department of Environmental Conservation has completed its evaluation of your Class III Solid Waste Disposal Permit application for the community of Chenega Bay. This site is located within Tract P (1.8 acres) and Lot 3 (5.38 acres) at the 0.4 Dump Road in Section 25, Township 1 South, Range 8 East, Seward Meridian. The Department issues the enclosed permit in accordance with AS 46.03, 18 AAC 15, and 18 AAC 60. This permit is effective upon issuance and expires **September 20, 2006**. Please review all the conditions and stipulations in the permit, and if acceptable, sign the enclosed permit acceptance form and return to the Department.

The community of Chenega Bay, located on Evans Island, requested a waiver of the regulation that requires a new unlined landfill, or lateral expansion, to maintain a 10' separation distance between its surface and the highest measured level of an aquifer of resource value (18 AAC 60.217). The waiver request indicates that it may not be possible to achieve a 10' separation distance on Evans Island without going significantly higher in elevation. If the community were required to develop a site at a higher elevation, it would be in a remote area currently inaccessible by vehicles. The impacts of this would include increased costs for the landfill construction and operation, deforestation, wildlife habitat degradation and a risk to public health due to the increased possibility of vehicular accidents and fuel spills.

In addition, Chenega Bay's domestic water supply is currently from a surface water source. The community has investigated potential groundwater sources for their domestic water supply, however these sources do not provide an adequate quantity.

As such, the Department approves the waiver request based on the information provided by Chenega Bay, which adheres to the regulatory requirements of 18 AAC 60.900. This regulation citation requires a demonstration that the cost of complying with the 10' separation distance would cost significantly more than the value of environmental benefit, public health risk reduction, and nuisance avoidance that could be achieved through the compliance with the separation distance.

Chenega Bay's landfill site has a shallow depth to bedrock. During the application review period, the Department determined that a layer of soil, a minimum of 12" thick, would be added to the floor of the proposed landfill area. Best management practices for landfills usually require two to three feet of soil over bedrock. The soil acts as a barrier and filter for water leaching throughout the landfill. If waste is placed directly on bedrock, the leachate can easily penetrate to groundwater or nearby surface water and cause a contamination problem. However, the community has limited soil resources available and a hardship would be created for the community if the Department required this amount of soil over the landfill site. Due to these difficulties, the Department approved a layer of soil, a minimum of 12" thick to be added to the floor of the proposed landfill area. This soil barrier, and the passive leachate control system that has been designed for the Chenega Bay's landfill site, should decrease the potential for surface water or groundwater contamination. However, if there are signs that the soil barrier is not effective, and there is evidence of death or stress to fish, wildlife, or vegetation, the community may need to reevaluate and revise the depth of the soil barrier and the manner in which the leachate is being managed.

Although closure of the existing community dump was not specifically addressed in this application, the Department would like to emphasize that it is critical that this site be closed in a manner that reduces future leachate generation and minimizes its impacts on human health and the environment. Closure of a site is best accomplished with a soil cover that minimizes infiltration of precipitation and therefore decreases water contact with the waste and the resulting leachate generation. Enclosed is a closure notification form that should be submitted to Department of Natural Resources. This will ensure that the waste disposal site will be permanently established and documented in the land records. Please contact ADEC, Solid Waste Program if the community would like technical assistance in their future efforts to close the existing community dump.

Any person who disagrees with this decision may appeal the decision by requesting an adjudicatory hearing, using the procedures contained in 18 AAC 15.200-310. Hearing requests must be delivered to the Commissioner of the Department of Environmental Conservation, 555 Cordova Street, Anchorage, Alaska 99501, within 30 days of receipt of this letter. If a hearing is not requested within 30 days, the right to appeal is waived and the decision becomes final. Even if an adjudicatory hearing has been requested and granted, all permit conditions remain in full force and effect. Please also send a copy of the request to the undersigned.

If you have any questions, please contact Tracy Mitchell in our Anchorage Office at 269-1099 or by email at *tracy\_mitchell@envircon.state.ak.us*.

Sincerely,

Heather T. Stockard Solid Waste Program Manager

Enclosures: Permit No. 0023-BA003

Permit Acceptance Form

Notification of Closure for a Class 3 Landfill

cc w/ Enclosures: Janet Bartel, ICRC

# ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION DIVISION OF ENVIRONMENTAL HEALTH

555 Cordova Street Anchorage, Alaska 99501

### CHENEGA BAY LANDFILL CLASS III MUNICIPAL SOLID WASTE LANDFILL

#### SOLID WASTE DISPOSAL PERMIT

Permit Number: 0023-BA003 Date Issued: **September 20, 2001** 

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This Solid Waste Disposal Permit is issued to the community of Chenega Bay, for the operation and maintenance of a Class III municipal solid waste landfill, located at 0.4 Dump Road, Chenega Bay, Alaska, within Section 25, Township 1 South, Range 8 East, Seward Meridian. The landfill boundaries are contained within Tract P (1.8 acres) and Lot 3 (5.38 acres). Operation of this facility is subject to the conditions and stipulations contained in the permit. Modifications may be requested by the permit holder, but must be authorized in writing by the Solid Waste Program Coordinator.

This permit is issued under the provisions of Alaska Statute 46.03 and the Alaska Administrative Code, as amended or revised, and other applicable state laws and regulations.

This permit is effective upon issuance and expires **September 20, 2006**. It may be terminated or modified in accordance with AS 46.03.120. A renewal application must be received at least 30 days before the expiration date, or the facility must be closed by the expiration date.

Heather T. Stockard Solid Waste Program Manager

## CHENEGA BAY LANDFILL MUNICIPAL SOLID WASTE LANDFILL FACILITY WASTE DISPOSAL PERMIT NUMBER 0023-BA003

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#### I. APPLICATION COMPLIANCE

 The Chenega Bay community shall comply with the site design drawings and development plans submitted in the permit application, dated April 30, 2001 and the addendum material dated July 11, 2001, unless otherwise modified in this facility permit. In the event of conflicting drawings or plans, the document dated last and closest to the date of permit issuance shall prevail.

#### II. SPECIFIC CONDITIONS

#### A. SITE DEVELOPMENT

- 1. Place a minimum of 12 inches of soil fill to the floor of the landfill to function as a working surface and separation from bedrock and/or groundwater.
- 2. Ensure that all waste disposal and storage areas at the landfill are sized to accommodate the waste volumes accepted at the site on a daily basis to prevent uncontrolled waste disposal.
- 3. Maintain fencing and a locking gate at the site entrance to control public access to the site.
- 4. Maintain permanent markers, such as surveying benchmarks, from which the exact location of the facility and each closed portion can be determined.
- 5. Maintain a minimum separation distance of 50 feet between the active placement of solid waste and the facility boundary.
- 6. Ensure that surface water runoff from outside of the facility and around the waste management areas does not flow over, into, or through uncovered or covered solid waste by constructing diversion structures, berms, or ditches at the facility.
- 7. Ensure that disposal area slopes are maintained to prevent erosion and to provide stability.
- 8. Water quality violations are prohibited. Surface drainage pathways from the landfill disposal area must be kept to a minimum and managed to prevent erosion and water quality degradation.
- 9. Facility drawings must be maintained and updated annually and a copy placed in the facility operating record. Drawings do not have to be done by an engineer or a surveyor.

- 10. Erect and maintain the following sign(s) at the landfill:
  - a. At the facility entrance, install and maintain a readily visible sign(s) with the following information legibly printed:

Facility Identification
Owner/Operator Name
Hours of Operation
Emergency Phone Numbers
Types of Wastes Allowed for Disposal
Prohibited Items and Wastes NOT Allowed for Disposal

- b. Erect and maintain readily visible signs as needed throughout the facility that will clearly and easily direct the public to each specific waste handling and disposal areas.
- c. Erect and maintain a sign at the landfill entrance that informs the public that waste loads hauled to the facility are required to be covered or secured in accordance with AS 46.06.080.

#### **B.** FACILITY OPERATIONS

#### **B.1 GENERAL**

- 1. Ensure that only domestic refuse, commercial refuse, inert construction and demolition debris, non-salvageable scrap metal, vehicles and white goods are disposed of at the appropriate cells or storage area within the facility.
- 2. Ensure that only domestic refuse, commercial refuse, inert construction and demolition debris, and other refuse that is acceptable for incineration will be incinerated prior to disposal.
- 3. Ensure that public access to the facility is controlled to reduce risks to health and to reduce safety hazards. Maintain on-site roads to assure easy user access to the facility at all times during open hours.
- 4. Ensure that refuse is deposited in approved locations only. Dumping in unauthorized areas violates conditions of this permit, Alaska Statutes, and Administrative Codes.
- 5. Prevent the excessive accumulation of salvaged, diverted and prohibited waste within the facility. Maintain a regular schedule of removal of this material to an approved disposal site, or to the location of ultimate reuse.

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6. Ensure that dust, odor, noise, traffic, and other effects from the operation of the facility do not become a nuisance or hazard to the health, safety, or property of persons outside the landfill boundary.

- 7. Manage the facility so that disease vectors, wildlife, and domestic animals do not endanger public health or safety, or become harmed by having contact with the waste, or become a nuisance.
- 8. Ensure that landfill personnel conduct random waste inspections on a monthly basis of incoming loads or waste in the burn box and landfill face, to check for prohibited wastes. Ensure that landfill personnel receive adequate training in the identification of hazardous waste and prohibited waste. Maintain a record of the random inspections noting the date, inspector name and what, if any, prohibited wastes were identified. The inspection records shall be maintained in the facility record.
- 9. Report all spills or discharges of hazardous substances that occur at the landfill facility as described in 18 AAC 75, Article 3, or as revised or amended. Thoroughly clean all spills or discharges of hazardous substances as soon as practicable.
- 10. Ensure medical wastes disposed of at the facility have first been disinfected, sterilized, or incinerated. Medical wastes, such as sharps, must also be packaged to prevent health and safety hazards.
- 11. Ensure that only one working face/dumping location for municipal waste is exposed at any one time, and that it be located at the current active cell.
- 12. Take reasonable steps to minimize vector attraction to the waste.
- 13. Implement a vector control plan, if vector attraction problems occur at the site. This plan must be DEC and Department of Fish and Game approved.
- 14. Prevent ponding in waste cell or over any waste disposal area, and implement a storm water management plan if ponding occurs. Conduct re-grading as needed.

#### **B.2** WASTE HANDLING AND BURIAL

- 1. Store waste prior to burial or burning in a safe and sanitary way that prevents a litter violation under AS 46.06.080, or polluted water runoff.
- 2. Store waste in a manner that prevents the attraction or access of wildlife or disease vectors into or around the burn box.

3. Compact, consolidate, and cover twice monthly all deposited waste with a minimum of 6 inches of soil by the end of each month when cover material is workable. Increase cover frequency if necessary to accommodate disposal volume increases or to control disease vectors, odors, fire, wildlife attraction, scavenging problems or blowing litter.

- 4. Maintain adequate supplies of cover material.
- 5. Ensure that solid wastes are not placed in or allowed to enter surface waters, ground water and wetlands.
- 6. Ensure that all non-salvageable drums, tanks, and other similar containers are empty of fluids and crushed or tops removed to prevent voids in the fill. Properly dispose of any non-conforming drum or drum residue in accordance with all applicable State and Federal laws, including but not limited to, RCRA, the Clean Water Act, the Clean Air Act, Title 46 of Alaska Statutes and 18 AAC 60.
- 7. Ensure that no oily or hazardous waste is deposited in the landfill by requiring waste characterization records for any unknown waste. Copies of the waste characterization must be maintained in the facility record at the landfill.
- 8. Ensure that scrapped vehicles and motorized equipment have been drained of all fluids and have lead-acid batteries removed prior to acceptance at the facility.
- 9. Hold all vehicles and white goods containing refrigerants in a temporary storage area until a certified technician removes CFCs (chlorofluorocarbons). Refrigerators and freezers must have their doors removed before they can be stored or disposed, or the appliances must be stored in such a way as not to present an unreasonable health or safety hazard to people prior to disposal.
- 10. Bury all animal carcasses and non-liquid seafood wastes with one foot of soil within 12 hours upon disposal at the facility or completely burn in burn box the same day it is deposited.
- 11. Apply an interim cover or final cover on a schedule as specified in the Closure Section of this permit.

#### **B.3 BURNING**

The permit holder shall:

Operate and maintain the burn box at the facility to ensure that approved combustible wastes
are reduced to ash residue prior to disposal into the active cell. The burn box shall be
operated in accordance with applicable standards of Air Quality Control Regulations, 18 AAC
50.

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2. Prohibit open burning of municipal waste unless conducted in a Department approved burn box.

- 3. Ensure that appropriate and immediate actions are taken to extinguish any uncontrolled fires that occur.
- 4. Ensure that controlled burn operations are monitored at all times during the process. Prohibit the placement of hot ashes or embers in waste cells.
- 5. Prohibit black smoke.

#### **B.4** LITTER

The permit holder shall:

- 1. Keep the landfill facility and surrounding adjacent area free of litter by collecting all the litter at least monthly or more frequently if needed, and returning it to the working face for burial or burn box.
- 2. Install and maintain portable litter control fencing near the working face if necessary, to collect wind blown litter.
- 3. Maintain fencing, gates, or covers on the burn box to control blowing waste and ash.

#### **B.5** SNOW CONTROL

The permit holder shall:

- 1. Remove snow from the active landfill disposal area as necessary to prevent ponding.
- 2. Deposit any snow removed in an area away from the landfill waste cells and clean up any accumulated litter in that area after the snow melts.

#### C. PROHIBITIONS AND SPECIAL RESTRICTIONS

- 1. Prohibit discharge of firearms at the facility.
- 2. Prohibit scavenging and salvaging by the public in the active disposal cell of the landfill.
- 3. Prohibit the disposal of raw sewage, contaminated soils, radioactive material, explosives, oil, solvents, strong acids, asbestos, toxic substances and untreated medical waste, and other waste defined as hazardous under 18 AAC 60.910(28) at the facility unless specifically

exempted in this permit.

4. Prohibit disposal of lead-acid batteries in the landfill. Storage in a designated area in closed, leak-proof containers prior to transport to an acceptable recycle site is permitted.

- Prohibit disposal of contaminated soil which contains metals or other chemicals in concentrations which the Department determines poses an unacceptable risk to human health or the environment. Prohibit disposal of contaminated soils that exceed the applicable limits of 18 AAC 60.025.
- 6. Prohibit the disposal of regulated asbestos or asbestos-containing material as defined under 18 AAC 60.990(108).

#### D. MONITORING AND REPORTING - VISUAL MONITORING

The permit holder shall:

 Visually monitor the site each month for signs of damage or potential damage from settlement, ponding, erosion, leachate seeps, animal attraction and compliance with other permit conditions. Record the inspection results with the name of the inspector and date. Maintain the inspection results in the facility's operating record. These records must be made available for review upon request by Department staff during inspections.

#### E. RECORD KEEPING REQUIREMENTS

Maintain a copy of the following records listed in Table A in the facility's operating record at the facility location for the active life and the post-closure period of the landfill. The records shall be made available to Department staff for review during facility inspections.

Table A

RECORD KEEPING REOUIREMENTS	REGULATION CITATION:
Permit application and permit	18 AAC 60.210
Operations & Maintenance Manual	18 AAC 60.210(b)(9)
Visual Inspections Records	18 AAC 60.210(b)(13)
Closure & post-closure plans & post-closure notation to deed (if applicable)	18 AAC 60.245 & 395(c)
Current site plan & cross sectional drawings of the landfill	18 AAC 60.210(b)(6)

#### F. CORRECTIVE ACTION

1. If a structural change or damage to the facility occurs; or, a violation of a permit condition is discovered, or is pointed out during a department inspection; the permit holder shall take action to correct the change, damage, or violation to prevent the escape of waste or leachate,

and to clean up any waste that may have been disposed of in a unauthorized manner as soon as practicable, but not longer than 90 days. If additional time is required, the Department must approve the extension in writing.

- 2. If the Department has evidence that water quality standards of 18 AAC 70 have been violated or if conditions at the facility are determined to likely result in harm to the public's health or the environment, the owner or operator shall sample and analyze any surface waters and/or groundwater that may indicate contamination has occurred. Indications of contamination may include, but will not be limited to, the visual presence of prohibited wastes, hazardous waste or potentially hazardous waste, surface staining, or a visually perceived degradation of water quality such as discoloration, sheen, or odor.
- 3. For purposes of this permit, contamination of surface water and/or groundwater shall be defined as any of the following:
  - a. groundwater and/or surface water contaminant levels exceeding levels specified in 18
     AAC 70 (Water Quality Standards) except those parameters documented as having
     natural background levels already exceeding these limits;
  - b. sudden, abrupt, or significant increases in any one or more pollutants which are attributable to site operation regardless of the listed MCLs; or
  - c. Statistically significant change over background levels.

#### G. SITE (FACILITY) CLOSURE

- 1. Ensure that final cover is placed within ninety (90) days after the last waste is deposited in a waste cell. Final cover must have a minimum of two feet of compacted soil and a 6-inch top layer consisting of soil adequate to allow for successful revegetation of the site with native vegetation.
- 2. Ensure that the final cover is graded and maintained to prevent ponding and erosion. Maintain drainage ditches and berms to minimize the amount of water entering the facility.
- 3. Develop a vegetative cover within the first growing season after closure of each disposal unit in the landfill facility.
- 4. Upon completion of final closure of landfill, establish permanent markers or survey monuments at each corner of the landfill facility boundary.
- 5. Closure activities must be inspected by a third party or supervised by the permit holder or a representative familiar with the closure requirements for the facility. Written verification in the

form of a notarized statement must be submitted, signed by the permit holder within 30 days of
the final closure action, stating that the closure/capping of the landfill was done on
(date (s)) in accordance with the permit conditions and solid waste regulations,
under supervision of (name), signature

- 6. Prepare a survey as-built or record drawings showing the location and volume of waste deposited at the solid waste disposal site and file those records with the Department's Anchorage Solid Waste Program Office.
- 7. File the survey as-built or record drawings of the area used as a landfill with an appropriate land records office within sixty (60) days after the final closure of the site and submit proof of such recording to this Department.

#### H. POST-CLOSURE

- Conduct annual visual monitoring that at a minimum will check for erosion, subsidence and seepage of all cells. Re-grade and fill areas of the closed cells that have eroded, settled, or subsided in order to maintain the integrity and effectiveness of the final cover.
- All post-closure activities shall be conducted for a minimum of 60 consecutive months following final capping of the waste cells. The Department may extend the time period as necessary to protect public health and the environment.

#### III. GENERAL PERMIT CONDITIONS

#### A. <u>ACCESS AND INSPECTION</u>

The permittee shall allow the Commissioner or his/her representative access to the permitted facilities at reasonable times to conduct scheduled or unscheduled inspections or tests to determine compliance with this permit, State laws, and regulations.

#### B. <u>INFORMATION ACCESS</u>

Except for information relating to trade secrets, submitted under a claim of confidentiality, and for which the Department has determined in writing that protection from disclosure is appropriate, all records and reports submitted in accordance with the terms of this permit shall be available for public inspection at the State of Alaska Department of Environmental Conservation, Fairbanks Office, 610 University Avenue, Fairbanks, Alaska 99709-3643.

#### C. CIVIL AND CRIMINAL LIABILITY

Nothing in this permit shall relieve the permittee from civil or criminal penalties for noncompliance, whether or not such noncompliance is due to factors beyond his control, including, but not limited to, accidents, equipment breakdowns, or labor disputes.

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#### D. AVAILABILITY

The permittee shall post or maintain a copy of this permit available to the public at the disposal facility.

#### E. ADVERSE IMPACT

The permittee shall take all necessary means to minimize any adverse impacts to the receiving waters or lands resulting from noncompliance with any limitation specified in this permit, including any additional monitoring needed to determine the nature and impact of the noncomplying activity. The permittee shall cleanup and restore all areas adversely impacted by the noncompliance.

#### F. CULTURAL OR PALEONTOLOGICAL RESOURCES

Should cultural or paleontological resources be discovered as a result of this activity, work which would disturb such resources is to be stopped, and the State Historic Preservation Office, Division of Parks and Outdoor Recreation, Department of Natural Resources, is to be notified immediately (907-269-8721).

#### G. <u>APPLICATIONS FOR RENEWAL</u>

Applications for renewal or amendment of this permit <u>must</u> be made no later than 30 days before the expiration date of the permit or the planned effective date of the amendment.

#### H. OTHER LEGAL OBLIGATIONS

The requirements, duties, and obligations set forth in this permit are in addition to any requirements, duties, or obligations contained in any permit that the Alaska Department of Environmental Conservation or the U.S. Environmental Protection Agency has issued or may issue to the permittee. This permit does not relieve the permittee from the duty to obtain any and all necessary permits and to comply with the requirements contained in any such permit or with applicable state and federal laws and regulations. All activities conducted by the permittee pursuant to the terms of this permit and all plans implemented by the permittee pursuant to the terms of this permit shall comply with all applicable state and federal laws and regulations.

#### I. POLLUTION PREVENTION

In order to prevent and minimize present and future pollution, when making management decisions that affect waste generation, the permittee shall consider the following order of priority options: waste source reduction; recycling of waste; waste treatment; and waste disposal.